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10/619,388	07/14/2003	William C. Kress	66329/24817	5439

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TUCKER ELLIS & WEST LLP
1150 HUNTINGTON BUILDING
925 EUCLID AVENUE
CLEVELAND, OH 44115-1414

EXAMINER
MENBERU, BENIYAM

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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@tuckerellis.com
christopher.luoma@tuckerellis.com

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>31 March 2009</u>.

2a) ☒ This action is FINAL.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>23-28</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>23-28</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All   b) ☐ Some * c) ☐ None of:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Response to Arguments

1.   Applicant's arguments filed March 31, 2009 have been fully considered but they
are not persuasive.

Applicant stated in the Remarks on page 12, that Yoda '716 does not disclose
"receiving comparison data". However Examiner disagrees because the "comparison
data" as disclosed can be any data that corresponds to the rendered image data. The
concept of "comparison data" as claimed does not have a specific definition. In this case
Yoda '716 discloses that image "based on the color data" is output to a display 22
(column 19, lines 39-54). Further the user can view the image and make corrections to
match the preference of the user. Thus this image data can be considered comparison
data since this image is used as a comparison to the preferred image a user wants. The
display is receiving the image data for display so this image data can be a "comparison
data".   Further with respect to Kondo '661, Applicant stated that the system of Kondo
'661 is not combinable with Yoda '716. However Examiner disagrees because the
teachings of Kondo '661 was used to disclose that reference/comparison color data can
be used to modify/change device profile data. In the system of Kondo '661, the
preferred color corresponds to the color output by the printing machine 40 (page 6,
paragraph 96). The image produced by the printer 60 is corrected to match that of
printing machine 40. Further Kondo '661 discloses generating color difference data
based on image from printing machine 40 (page 6, paragraph 98; data based on 43)
and image based on printer 60 (pages 6-7, paragraph 99; data based on 64). These two

data are used to generate difference data for modifying device link profile 600. Thus the

modification of the device link profile is based on comparison of the preferred image

(printing machine data 40) and the proofing data (printer 40). The reference of Yoda

'716 and the reference of Kondo '661 are combinable because they are both in the

similar art of color conversion and the teachings of Kondo '661 was used to disclose of

modifying device profile to provide color matching between two systems.

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had

possession of the claimed invention.

   Claim 23 discloses "receiving primary device link profile data" which is not

disclosed in the original specification. The term "link profile data" is not disclosed

anywhere in the original specification.

   Claim 23 discloses "plurality of vertex values, each vertex value having a value

associated with a corresponding primary color of the color spaces" which is not

disclosed in the original specification. The limitation "plurality of vertex values" is not

disclosed anywhere in the original specification.

Claim 23 discloses "receiving comparison data corresponding to a rendered

image". The limitation "comparison data" is not disclosed anywhere in the original

specification. In addition there is no disclosure of a "correspondence with a rendered

image" in the original specification.

Claim 23 further discloses that "the comparison data including result values

corresponding with a rendered image relative to the selected primary device link profile

data". There is no disclosure of "**result values**" which correspond to rendered image

relative to the selected primary device link profile data".

Claim 23 discloses "generating modified device like profile data in accordance

with received comparison data". Although the original disclosure states on page 5, lines

22-24, that changes can be made to the profile, it does not disclose making changes in

"**accordance with received comparison data".**

Claim 23 discloses "storing modified device link profile data for use in

accordance with subsequent conversions of image data between the input color space

and the output color space". The limitation of "storing modified device link profile data" is

not disclosed anywhere in the original specification. Further there is no support for

"**subsequent conversions of image data**" in the original specification in conjunction

with the storing of a modified device link profile data.

3.   Claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had

possession of the claimed invention.

        Claim 24 discloses "generating comparison data in accordance with the rendered

image and received tag data". The limitation "comparison data" is not disclosed

anywhere in the original disclosure. Further there is no disclosure of using the rendered

image and tag data to generate any kind of data in the original disclosure.

4.   Claim 25 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had

possession of the claimed invention.

        Claim 25 discloses "generating comparison data in accordance with received

selection data". The limitation "comparison data" is not disclosed anywhere in the

original disclosure. Further there is no disclosure of using the selection data to

generate any kind of data in the original disclosure.

5.   Claim 26 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 26 discloses "receiving primary device link profile data" which is not disclosed in the original specification. The term "link profile data" is not disclosed anywhere in the original specification.

Claim 26 discloses "plurality of vertex values, each vertex value having a value associated with a corresponding primary color of the color spaces" which is not disclosed in the original specification. The limitation "plurality of vertex values" is not disclosed anywhere in the original specification.

Claim 26 discloses "receiving comparison data corresponding to a rendered image". The limitation "comparison data" is not disclosed anywhere in the original specification. In addition there is no disclosure of a "correspondence with a rendered image" in the original specification.

Claim 26 further discloses that "the comparison data including result values corresponding with a rendered image relative to the selected primary device link profile data". There is no disclosure of "**result values**" which correspond to rendered image relative to the selected primary device link profile data".

Claim 26 discloses "generating modified device like profile data in accordance with received comparison data". Although the original disclosure states on page 5, lines 22-24, that changes can be made to the profile, it does not disclose not making changes in "**accordance with received comparison data".**

Claim 26 discloses "storing modified device link profile data for use in accordance with subsequent conversions of image data between the input color space and the output color space". The limitation of "storing modified device link profile data" is not disclosed anywhere in the original specification. Further there is no support for "**subsequent conversions of image data**" in the original specification in conjunction with the storing of a modified device link profile data.

6.   Claim 27 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 27 discloses "generating comparison data in accordance with the rendered image and received tag data". The limitation "comparison data" is not disclosed anywhere in the original disclosure. Further there is no disclosure of using the rendered image and tag data to generate any kind of data in the original disclosure.

7.   Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 28 discloses "generating comparison data in accordance with received

selection data". The limitation "comparison data" is not disclosed anywhere in the

original disclosure. Further there is no disclosure of using the selection data to

generate any kind of data in the original disclosure.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Patent No. 6781716 to Yoda in view of U.S. Patent Application Publication

No. US 2003/0214661 A1 to Kondo.

Regarding claim 23, Yoda '716 discloses a colors space conversion system

(column 17, lines 39-41) comprising:

means adapted for receiving primary device link profile data, selected from a plurality

thereof (column 19, lines 54-59; column 20, lines 2-18, 24-50; The designated

conversion table 342 is selected from among all the conversion tables 342a, b, ... based

on information from the input/output profile. The converter 320 receives the selected

conversion table in addition to the input/output profile. Thus the set of input/output

profile and conversion table form the device link profile data.), corresponding to a

relationship between an input color space having an associated input gamut and an

output color space having an associated output gamut (column 12, lines 32-49; input

color space is RGB and output color space is CMYK; gamut mapping is used to map

gamut), the primary device link profile data including a plurality of vertex values, each

vertex value having a value associated with a corresponding primary color of the color

spaces (column 15, lines 65-67; column 16, lines 1-25; conversion table contains

conversion value for red, yellow, green primary colors which are associated with vertex

value of L*a*b* values shown in Table 1, 2);

means adapted for converting input color image data encoded in the input color space

to output color image data in accordance with application of the primary device link

profile data (column 11, lines 63-67; column 12, lines 10-24; conversion from input RGB

to CMYK output color space using input/output profile and conversion table (device link

profile)), which conversion includes empirical values of the selected primary device link

profile data relative to vertex values of a color space defining the input gamut (column

20, lines 36-50, 65-67; column 21, lines 31-36; column 12, lines 33-45; column 16, lines

1-25; The designated input/output profile and conversion table (selected primary device

link) is used to convert from RGB to CMYK color space. The input gamut is defined by

L*a*b* values (vertex values) as shown in Table 1, 2 for the L*a*b* color space. The

empirical values correspond to the CMYK values outputted by the conversion relative to

the L*a*b* values (column 16, lines 53-67).);

means adapted for receiving comparison data corresponding to a rendered image

(column 19, lines 39-46; The "image based on the color data" following the conversion

is the comparison data received by the display 22a.), which rendered image is

generated in accordance with the output color image data and input color space data corresponding thereto (column 19, lines 39-46; The image is based on conversion from input to output color by converter 320.), the comparison data including result values corresponding with a rendered image relative to the selected primary device link profile data (column 19, lines 39-46; The conversion in 320 is based on input/output profile and conversion table (device link profile) (column 19,lines 10-15). The rendered image is based on the image data after conversion which is to be displayed as comparison data.). However Yoda '716 does not disclose means adapted for generating modified device like profile data in accordance with received comparison data; and

means adapted for storing modified device link profile data for use in accordance with subsequent conversions of image data between the input color space and the output color space.

Kondo '661 discloses:

means adapted for generating modified device link profile data in accordance with received comparison data (page 7, paragraph 100; device Link profile 600 is corrected based on color difference of comparison data (calorimetric values). The comparison data corresponds to the difference data); and

means adapted for storing modified device link profile data for use in accordance with subsequent conversions of image data between the input color space and the output color space (page 4, paragraph 65; PC 50 stores corrected profile which is used for CMYK conversion).

Having the system of **Yoda '716** and then given the well-established teaching of **Kondo '661**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Yoda '716** as taught by **Kondo '661**, since **Kondo '661** stated in page 7, paragraph 100, such a modification would provide accuracy for the device link profile 600.

Regarding claim 26, see rejection of claim 23 as shown above. The system of Yoda '716 in view of Kondo '661 renders obvious the method steps disclosed in claim 16.

10.   Claims 24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6781716 to Yoda in view of U.S. Patent Application Publication No. US 2003/0214661 A1 to Kondo further in view of U.S. Patent No. 6967746 to Walker et al.

Regarding claim 24, Yoda '716 in view of Kondo '661 teaches all the limitations of claim 23. However Yoda '716 in view of Kondo '661 does not disclose means adapted for receiving tag data corresponding to a device associated with the input gamut; and

generating means adapted for generating comparison data in accordance with the rendered image and received tag data.

Walker et al '746 discloses means adapted for receiving tag data corresponding to a device associated with the input gamut (column 5, lines 14-25; "Tags" in profiles used for gamut mapping. Column 7, lines 45-46); and

generating means adapted for generating comparison data in accordance with the rendered image and received tag data (column 5, lines 24-35; The comparison data can correspond to the PCS>PCS transform based on modified source transform which is based on destination (rendered image) and preference of user (Tag information (column 5, lines 23-25).

Having the system of *Yoda '716 in view of Kondo '661* and then given the well-established teaching of *Walker et al '746*, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of *Yoda '716 in view of Kondo '661* as taught by *Walker et al '746*, since *Walker et al '746* stated in col. 5, lines 21-27, such a modification would provide user with control over the gamut processing.

Regarding claim 27, see rejection of claim 24 as shown above. The system of Yoda '716 in view of Kondo '661 further in view of Walker et al '746 renders obvious the method steps disclosed in claim 27.

11.   Claims 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6781716 to Yoda in view of U.S. Patent Application Publication No. US 2003/0214661 A1 to Kondo further in view of U.S. Patent No. 6967746 to Walker et al further in view of U.S. Patent Application Publication No. US 2002/0149786 A1 to Hudson et al.

Regarding claim 25, Yoda '716 in view of Kondo '661 further in view of Walker et al '746 teaches all the limitations of claim 24. However Yoda '716 in view of Kondo '661 further in view of Walker et al '746 does not disclose the color space conversion

system of claim 24 further comprising means adapted for receiving selection data corresponding to a selected output mode of an associated image rendering device, and wherein the generating means further includes means adapted for generating comparison data in accordance with received selection data.

Hudson et al '786 discloses means adapted for receiving selection data corresponding to a selected output mode of an associated image rendering device (page 5, paragraph 54; Author selects rendering choice (output mode) using 702 for printer (rendering device).), and wherein the generating means further includes means adapted for generating comparison data in accordance with received selection data (page 5, paragraph 64, 65, 66; The preview data for the author is based on rendering choice selected through 716 and 702. The preview data can be used as comparison data for comparing how print output looks like.).

Having the system of *Yoda '716 in view of Kondo '661 further in view of Walker et al '746* and then given the well-established teaching of *Hudson et al '786*, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of *Yoda '716 in view of Kondo '661 further in view of Walker et al '746* as taught by *Hudson et al '786*, since *Hudson et al '786* stated in page 1, paragraph 9 and page 5, paragraph 66, such a modification would provide printing output based on comparison to produce an output as required by the author.

Regarding claim 28, see rejection of claim 25 as shown above. The system of

Yoda '716 in view of Kondo '661 further in view of Walker et al '746 further in view of

Hudson et al '786 renders obvious the method steps disclosed in claim 28.

Other Prior Art Cited

12.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U.S. Patent 6553431 to Yamamoto et al disclose device profile processing

system.

Conclusion

13.   **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded

of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and

any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

date of the advisory action. In no event, however, will the statutory period for reply

expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENIYAM MENBERU whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner
Beniyam Menberu

/Beniyam Menberu/
Examiner, Art Unit 2625

05/08/2009

/David K Moore/

Supervisory Patent Examiner, Art Unit 2625